

IN THE CLAIMS

1. (currently amended) A method of medical ultrasonic imaging comprising:

transmitting ultrasonic waves into a volume at different steering angles;

receiving ultrasonic echoes for each of the ultrasonic waves, each ultrasonic echo being indicative of a density interface within the volume, said ultrasonic echoes being organized into steering frames;

identifying a distal shadow within at least one of said steering frames;
~~and frames;~~

combining said steering frames into a compound image; and

identifying an area of substantially orthogonal echo reflection from a density interface in one of the steering frames.

2. (currently amended) A method in accordance with Claim 1 wherein said ~~identifying step~~ identifying the distal shadow comprises highlighting the distal shadows on the compound image.

3. (original) A method in accordance with Claim 2 wherein said highlighting step comprises selectively highlighting the distal shadows on a spatially compounded image display.

4. (currently amended) A method in accordance with Claim 1 wherein said ~~identifying step~~ identifying the distal shadow comprises selectively tinting the distal shadows on the compound image.

5. (currently amended) A method in accordance with Claim 1 further comprising identifying an area of substantially orthogonal echo reflection from a density interface ~~in each~~ in the remaining of the steering frames

6. (original) A method in accordance with Claim 5 wherein identifying an area of substantially orthogonal echo reflection comprises highlighting the orthogonal echo reflection areas on the compound image.

7. (original) A method in accordance with Claim 1 wherein said identifying step comprises backcalculating echo reflection data to identify a source of the distal shadow.

8. (original) A method in accordance with Claim 1 wherein backcalculating echo reflection data to identify a source of the distal shadow comprises backcalculating echo reflection data using an exponential algorithm.

9. (currently amended) An ultrasound system, comprising:

a transmitter for transmitting ultrasonic waves into a volume at different steering angles;

a receiver for receiving ultrasonic echoes for each of said ultrasonic waves, each said ultrasonic echo being indicative of a density interface within the volume, said ultrasonic echoes being organized into steering frames;

a signal processor identifying a distal shadow in each steering frame, said signal processor combining said steering frames into a compound image; and

a display for outputting information based on said identified distal shadows, wherein said system backcalculates echo reflection data to identify a source of the distal shadow.

10. (original) An ultrasound system in accordance with Claim 9 wherein said system highlights said distal shadows on an image display.

11. (original) An ultrasound system in accordance with Claim 10 wherein said system is configured to selectively highlight said distal shadows on an image display.

12. (original) An ultrasound system in accordance with Claim 9 wherein said system is configured to selectively tint the distal shadows on an image display.

13. (original) An ultrasound system in accordance with Claim 9 wherein said system is further configured to identify an area of substantially orthogonal echo reflection from a density interface in each steering frame.

14. (original) An ultrasound system in accordance with Claim 13 wherein said system highlights the orthogonal echo reflection areas on an image display.

15. (original) An ultrasound system in accordance with Claim 13 wherein said system tints the orthogonal echo reflection areas on an image display.

16. (canceled)

17. (original) An ultrasound system in accordance with Claim 9 wherein said system backcalculates echo reflection data using an exponential algorithm.

18. (currently amended) A computer program embodied on a computer readable medium for controlling medical ultrasonic imaging comprising, said program comprising a code segment that receives user selection input data and then:

transmits ultrasonic waves into a volume at different steering angles;

receives ultrasonic echoes for each of the transmitted ultrasonic waves, each received echo being indicative of a density interface within the volume, each ultrasonic echo being organized into steering frames;

identifies distal shadows in each steering ~~frame;~~ and frame;

combines steering frames into a spatially compounded image; and

identifies an area of substantially orthogonal echo reflection from a density interface in one of the steering frames.

19. (original) A computer program in accordance with Claim 18 further comprising a code segment that highlights the distal shadows on the compounded image.

20. (original) A computer program in accordance with Claim 19 further comprising a code segment that selectively highlights the distal shadows on the compounded image.

21. (original) A computer program in accordance with Claim 18 further comprising a code segment that selectively tints the distal shadows on the compounded image.

22. (currently amended) A computer program in accordance with Claim 18 further comprising a code segment that identifies an area of substantially orthogonal echo reflection from a density interface ~~in each~~ in the remaining of the steering frameframes.

23. (original) A computer program in accordance with Claim 22 further comprising a code segment that highlights the orthogonal echo reflection area on the compounded image.

24. (original) A computer program in accordance with Claim 22 further comprising a code segment that tints the orthogonal echo reflection areas on the compounded image.

25. (original) A computer program in accordance with Claim 18 further comprising a code segment that backcalculates the echo reflection data to identify a source of the distal shadow.

26. (original) A computer program in accordance with Claim 18 further comprising a code segment that backcalculates the echo reflection data using an exponential algorithm.